Dart Aerospace Ltd. Tuesday, 12/5/2006 8:20:10 AM Date: User: Kim Johnston **Process Sheet** : BRACKET ASSEMBLY **Drawing Name** : CU-DAR001 Dart Helicopters Services Customer Job Number : 29819 : 10280 **Estimate Number** : NA Part Number : D3137043 P.O. Number S.O. No. : NIA : D3137 REV E **Drawing Number** : 12/5/2006 This Issue **Project Number** : N/A, : NC Prsht Rev. : MA : MACHINED PARTS : E **Drawing Revision** First Issue Type : 29700 Material Previous Run : 1/5/2007 Qty: 12 Um: **Due Date** Written By Checked & Approved By : Est Rev:A 04.02.18 New issue KJ/DS Comment **Additional Product** Job Number: Description: Seq. #: Machine Or Operation: M174B0500X02000 17-4 SS Bar 1.0 Comment: Qty.: Total: 5.8502 f(s) 0.4875 f(s)/Unit Material: 17-4 SS Bar per AMS 5604/5643 (M17-4-B0.500x02.000) Identify for D3137-7 Batch: 103089 BAND SAW 2.0 BAND SAW Comment: BAND SAW Cut blanks: (.500" x 2.000") 5.570" long HAAS CNC VERTICAL MACHINING #1 3.0 Comment: HAAS CNC VERTICAL MACHINING #1

1-Machine D3137-7 as per Folio FA3308and Dwg D3137 Identify as D3137-7

2-Deburr

3-Scribe batch number

INSPECT PARTS AS THEY COME OFF MACHINE

Each

4.0

QC2

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

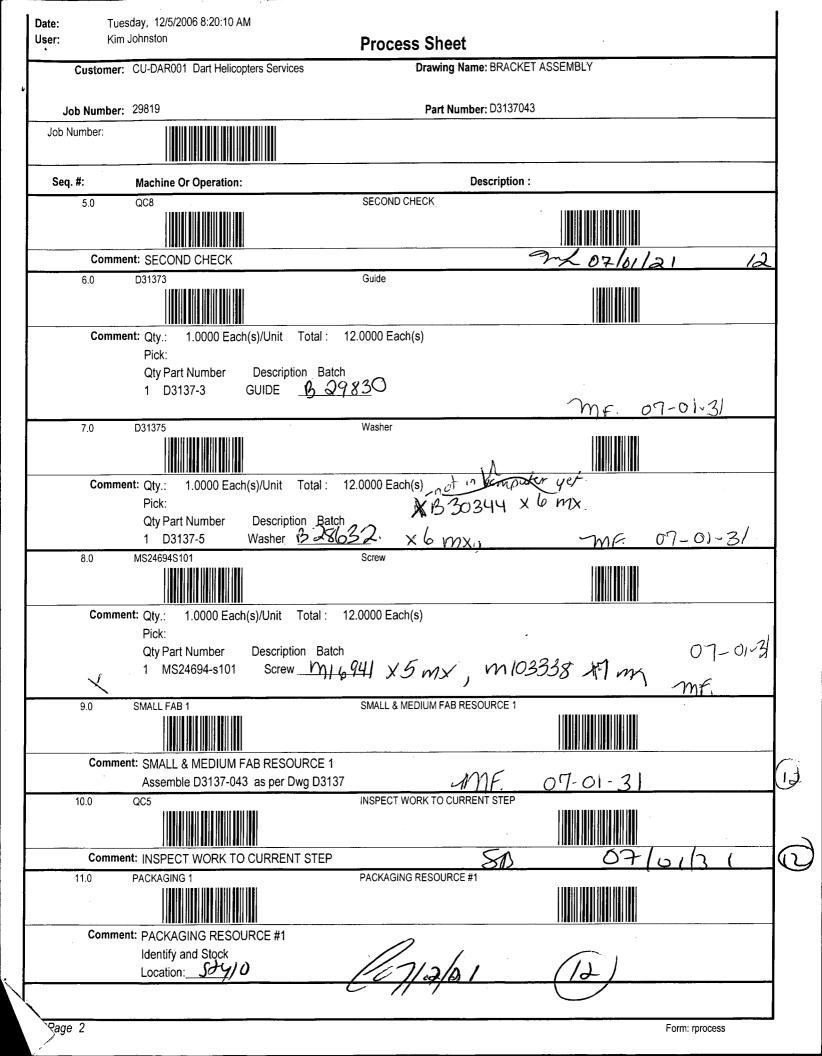
# **Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
Part No	.•	PAR #· Fault Category:	NCP: Vac	No DO	۸.	Date:					

QA: N/C Closed: \_\_\_\_ Date: \_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)								
		Description of NC		Corrective Action Section B		Verification	A	A		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector		
						·				
				•						

NOTE: Date & initial all entries



# **Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
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	:										
				·		1	·				

Part No:	PAR #:	Fault Category: _	NCR: Yes (No) DQA:	Date:07/02/05
			QA: N/C Closed:	Date:

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC	Corrective Action Section B			Verification Approval	Annroval		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector	

NOTE: Date & initial all entries

Date:

Tuesday, 12/5/2006 8:20:10 AM

User:

Kim Johnston

Customer: CU-DAR001 Dart Helicopters Services

**Process Sheet** 

Drawing Name: BRACKET ASSEMBLY

Job Number: 29819

Part Number: D3137043

Job Number:



Seq. #:

**Machine Or Operation:** 

Description:

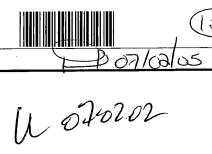
12.0

QC21

FINAL INSPECTION/W/O RELEASE



XI J



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



# **Dart Aerospace Ltd**

W/O:		WORK ORDER CH	WORK ORDER CHANGES								
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
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Part No	:	PAR #: Fault Category:	NCR: Yes	No DQ	<b>A</b> :	_ Date: _	<del> </del>				
			QA:	N/C Close	d:	Date:					

NCR:			WORK ORDER NON-CONFORMANCE (NCR)							
		Description of NC		Corrective Action Section B		Verification	`Approval			
DATE	STEP	Section A	Initial Chief Eng	Action Description  Chief Eng	Sign & Date	Section C	Chief Eng	Approval QC Inspector		
						:				
						4				

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	29819
Description: Bracket	Part Number:	D3137-7
Inspection Dwg: D3137 Rev: E		Page 1 of 1

### FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.435	+/-0.010					
0.615	+/-0.010					
0.200	+/-0.010					
0.380	+/-0.010					
0.262	+/-0.010		~			
Ø0.500	+0.005/-0.000					
0.79	+/-0.030					
2.79	+/-0.030					10
Ø0.560	+0.005/-0.000					100
0.595	+/-0.010			-	79	/
0.950	+/-0.010		7		L '	
0.605	+/-0.010		$I \cap I$	e		
1.880	+/-0.010		ノ(フ			
2.48	+/-0.030					
4.975	+/-0.010	00.				
5.41	+/-0.030					
0.032	+/-0.010					
0.063	+/-0.010					
R0.062	+/-0.010					
0.162	+/-0.010					
		,				

Measured by:	Audited by:	Prototype Approval:	N/A
Date: 67.01.16	Date:	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	03.11.12	New Issue P/O D3137-043	KJ/RF	
В	04.06.15	Changed & added dimensions	KJ/JLM LA	
С	06.03.15	Dwg Rev update	KJ/JLM O	



DESIG	N DS	DRAWN BY RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHEC	(ED	APPROVED	DRAWING NO. REV. E D3137 SHEET 1 OF 5
DATE	_71	<u> </u>	D313/ SHEET 1 OF 5 TITLE SCALE
05.1	1.23		BRACKET ASSEMBLY 1:1
Α		02.04.17	NEW ISSUE
В		03.01.16	ADD RIDGES; ADD MAT'L PROP.
С		03.08.15	ADD -043
D		04.11.03	RE-DESIGN D3137-5; CHANGE DIMS
Ε		05.11.23	ADD -045

OS-12.09

MS24694-S101 SCREW

D3137-5 WASHER

D3137-3 GUIDE

INSTALL ON SAME SIDE AS C'SINKS

(OPPOSITE SIDE FROM RIDGES)

D3137-1 BRACKET (-041 SHOWN)
OR
-D3137-7 BRACKET (-043 SIMILAR)
OR

D3137-9 BRACKET (-045 SIMILAR)

D3137-041 BRACKET ASSEMBLY (SHOWN)
D3137-043 BRACKET ASSEMBLY (SIMILAR)
D3137-045 BRACKET ASSEMBLY (SIMILAR)

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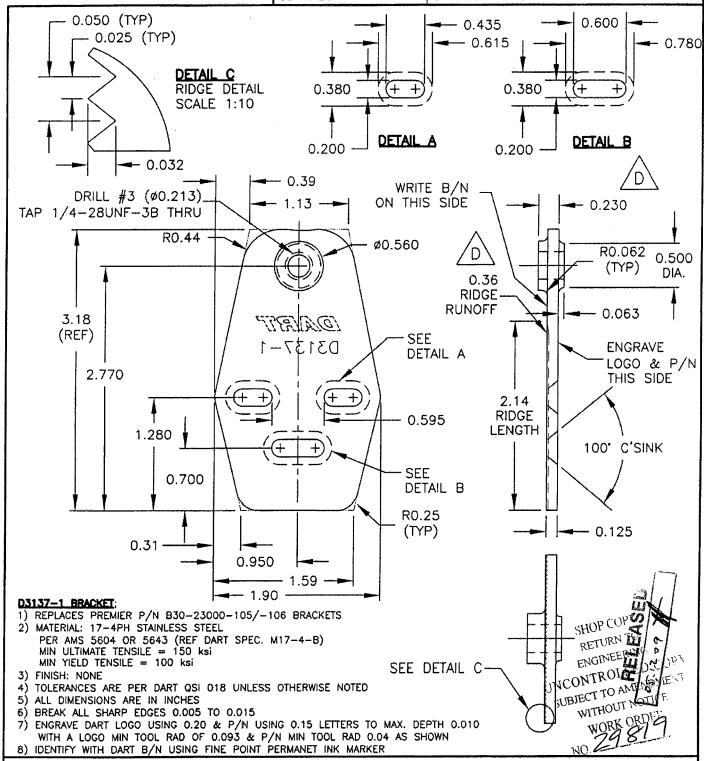
WORK ORDE

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05.11.23		BRACKET ASSEMBLY	1:1

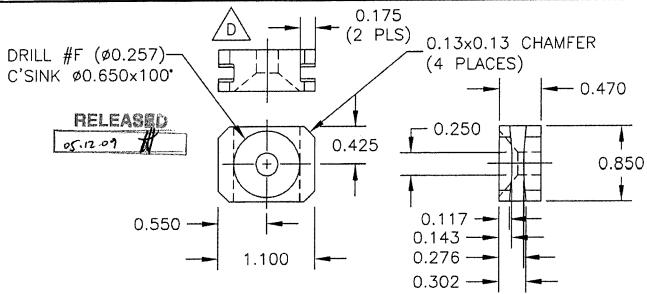


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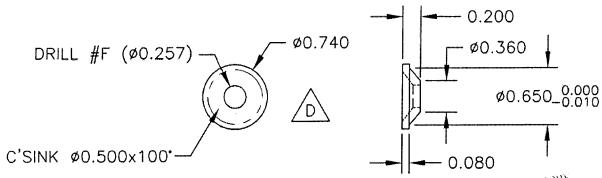


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-14	-	D3137	SHEET 3 OF 5
DATE		TITLE	SCALE
05.11.23		BRACKET ASSEMBLY	1:1



### D3137-3 GUIDE

- 1) REPLACES PREMIER P/N B30-23000-207
- 2) MATERIAL: DELRIN BAR (REF DART SPEC. M-DELRIN-B)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL EDGES 0.005 TO 0.015



### D3137-5 WASHER

- 1) REPLACES PREMIER P/N B30-23000-209
- 2) MATERIAL: 6061-T6 (QQ-A-225/8 OR QQ-A-200/8) BAR (REF DART SPEC MAGGINER) COT 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL EDGES 0.005 TO 0.015

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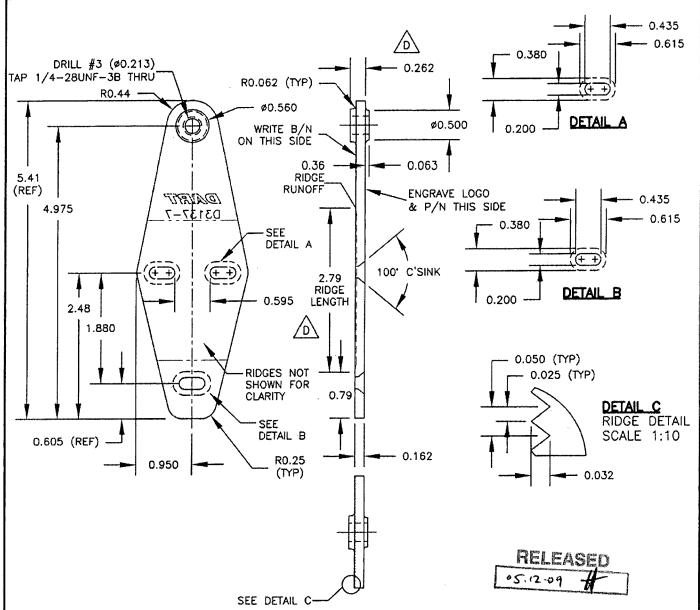
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DATE		TITLE	SCALE
05.11.23		BRACKET ASSEMBLY	2:3



D3137-7 BRACKET:

1) MATERIAL: 17-4PH STAINLESS STEEL PER AMS 5604 OR 5643 (REF DART SPEC. M17-4-B) MIN ULTIMATE TENSILE = 150 ksi MIN YIELD TENSILE = 100 ksi

FINISH: NONE

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

4) ALL DIMENSIONS ARE IN INCHES

5) BREAK ALL SHARP EDGES 0.005 TO 0.015

ENGRAVE DART LOGO USING 0.20 & P/N USING 0.15 LETTERS TO MAX. DEPTH 0.010 WITH A LOGO MIN TOOL RAD OF 0.093 & P/N MIN TOOL RAD 0.04 AS SHOWN

7) IDENTIFY WITH DART B/N USING FINE POINT PERMANENT INK MARKER

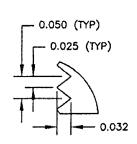
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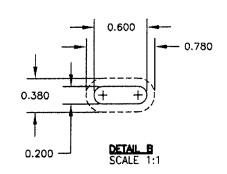
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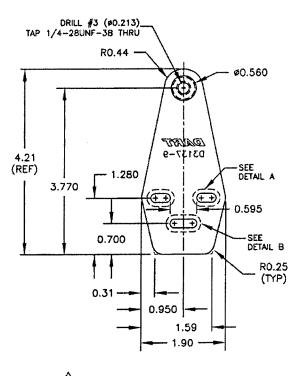
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DATE	1	TITLE	SCALE
05.11.23		BRACKET ASSEMBLY	1:2

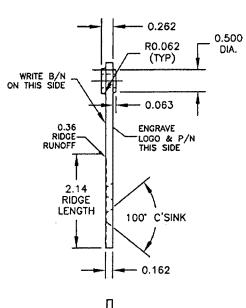


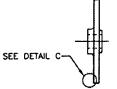
0.435 0.615 0.380 DETAIL 0.200 SCALE 1:1



DETAIL C RIDGE DETAIL SCALE 1:20









- 1) REPLACES PREMIER P/N B30-23000-105/-106 BRACKETS
  2) MATERIAL: 17-4PH STAINLESS STEEL
  PER AMS 5604 OR 5643 (REF DART SPEC. M17-4-B)
  MIN ULTIMATE TENSILE = 150 ksi MIN YIELD TENSILE = 100 ksi
- 3) FINISH: NONE
- 4) TOLERANCES ARE PER DART OSI D18 UNLESS OTHERWISE NOTED 5) ALL DIMENSIONS ARE IN INCHES 6) BREAK ALL SHARP EDGES 0.005 TO 0.015

- 7) ENGRAVE DART LOGO USING 0.20 & P/N USING 0.15 LETTERS TO MAX. DEPTH 0.010
  WITH A LOGO MIN TOOL RAD OF 0.093 & P/N MIN TOOL RAD 0.04 AS SHOWN
  8) IDENTIFY WITH DART B/N USING FINE POINT PERMANENT INK MARKER

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